

E. Lee, Jr., son of the famous Confederate general, who, from 1852 to 1855, was superintendent on the Post." He had many warm friends among the members of the New England Botanical Club of which he was a non-resident member, and he attended a number of its meetings in the earlier years of its life before his physical troubles increased.

In 1906 Bailey's failing health compelled his resignation from his college work. He was honored with the title of Professor Emeritus, and during the remainder of his life he lived quietly at home, devoting much of his time to reading and writing. But his ever increasing physical troubles wore heavily upon him and at last, on February 20, 1914, he died. The funeral was held at the family home in Providence on February 23. At his own request his coffin was draped with the American flag, and the authorities at West Point allowed his body to be laid to rest in the Academy grounds near that of his father.

On March 14, 1881, Professor Bailey was married to Eliza Randall Simmons of Providence. She and two children, Whitman and Margaret Emerson, survive him.

CAMBRIDGE, MASSACHUSETTS.

OPUNTIA VULGARIS ON CAPE COD.

F. S. COLLINS.

THE occurrence of *Opuntia vulgaris* Mill. at Nantucket has long been a matter of record; it is common there on the peninsula of Coatue. The earliest record appears to be by Hitchcock in 1833.¹ "Cactus *Opuntia*, Nantucket, T. A. Green. *Prickly Pear*." It does not appear in the first and second editions of Bigelow's *Florula*, but is mentioned in the third edition.² "Found at Nantucket, June, July."

In the first edition of Gray's *Manual*, 1848, p. 141, the distribution is given as "Sandy fields and dry rocks, Nantucket to N. J. and southward near the coast." Later editions have practically the same. In

¹ Edward Hitchcock, Report on the Geology, Mineralogy, Botany and Zoology of Massachusetts, p. 605.

² Jacob Bigelow, *Florula Bostoniensis*, third ed., 1840, p. 203.

the various editions of Britton's Manual and Britton and Brown's Flora, the range is given as "Eastern Mass. to Penn. & Fla." From a purely geographical point of view, "Eastern Mass." is correct for Nantucket, though possibly misleading as implying a wider range. I have been unable, however, to find any Massachusetts station recorded outside of Nantucket.

On October first, 1913, I was making my last collecting trip of the season, in Wellfleet, Massachusetts, and I came upon a large colony of the *Opuntia*, thoroughly established. It was about a mile from the settled part of the town, and grew on both sides of the road for two hundred feet or more, extending back into the fields. The plants were nearly prostrate, merely projecting slightly; the flowering season was past, but there was abundance of the fruit, sometimes as many as five fruits on a single segment. It appeared to occupy the ground so thoroughly that no other vegetation but a scanty growth of grass was found among it. The fruit, though well formed and containing hard seeds, was only about half the size of what I had seen on plants of the same species in Bermuda, two months before.

There was a "No Trespass" sign near by; usually a botanist pays no attention to such signs, but in this case it had some interest, as it gave the name of the owner of the property, George W. Lawrence, and I wrote to Mr. Lawrence, asking for information in regard to the plant. He very kindly replied as follows: — "I have consulted an old lady (87 years of age) who used to live in the old Hickman house, as we call it, when she was a girl, and she says, the prickly pear cactus was there at that time; she does not know where it might have come from. I have owned the place since Nov. 1908, and the man I bought it of has just died. The 'No Trespass' sign was to keep the boys away from the fruit. An old gentleman (79) a native, says it was there when he was a small boy. The old Hickman family used to have beautiful flowers, so my wife says, and she used to visit at the old house when she was very young. Probably the plant was brought there sometime, as it is not found anywhere else in town."¹

I referred to my discovery at a meeting of the New England Botanical Club, in the hope of hearing of other stations, and was again fortunate, for Mr. C. F. Batchelder remembered having seen it, and at my request he notes the following particulars: — "In September, 1876, I

¹ Later Mr. Lawrence wrote me "Mr. Nye, our postmaster, tells me there is another little patch of the 'cactus' up by Higgins Pond, about two miles from my place."

found a small *Opuntia* (doubtless *O. vulgaris*) growing at the head of a sand beach near Osterville, in the township of Barnstable, on the south side of Cape Cod. According to my recollection, there was no single large colony, but small plants grew scatteringly along the beach; whether or not it was widely distributed along the coast, I cannot say."

With a view of ascertaining whether the plant persisted, I wrote to Mrs. Margaret M. Theodore of Centerville, who is familiar with the flora of that region, and she writes, "I have looked through Mrs. Cheney's 'Plants from Cape Cod' hoping to be able to locate your Prickly Pear exactly in it, as she made exhaustive examinations of this region, but do not find it in the list. Then comes my young naturalist, my boy John, to the rescue.—'Sure I know where to find it. There's two or three lots of it around here,' and he describes it accurately." Osterville and Centerville are settlements in the town of Barnstable, about a mile apart.

Mr. W. P. Rich tells me that it grows in Truro, on the grounds of Mr. Solomon Ryder, who has lived there for over 40 years, and who reports that it was there when he came. It now extends from the house over the lawn, into fields and under trees in every direction. In 1911 Mr. Rich transplanted a number of these plants from Mr. Ryder's place to a barren "sand lot" near the shore by his summer home at Truro; they thrived and are spreading, and flowered freely in 1912 and 1913.

The Truro station is the northernmost; from there to Wellfleet is five miles, from Wellfleet to Barnstable 25 miles. It seems now safe to consider *Opuntia vulgaris* as fairly established on the Cape; as to whether it is native may not be as clear. Mr. Rich is of the opinion that the plant was introduced at the Ryder station; the Lawrence station at Wellfleet, though it has a record of at least 75 years, appears to have an old farm house as its center of distribution. The Barnstable localities more resemble the Coatue station at Nantucket, which has always been considered as free from suspicion of human agency. It is not uncommon in gardens at Nantucket, transplanted from Coatue, and it may well be that old time captains from Truro and Wellfleet brought it to their gardens in the same way. Its present distribution seems to be much the same as that of other species which inhabit the coastal plain. It is common along the coast of New Jersey; five stations are recorded for Long Island, New York.¹ In Connecti-

¹ Smith Ely Jelliffe, *The Flora of Long Island*, 1899, p. 118.

cut the record is ¹ "Exposed rocks and sandy soils, occasional along the coast, rare inland." Possibly other stations similar to those in Barnstable may be discovered, now that there is reason to look for them; in any case, it is now a part of the Cape flora.

We are accustomed to think of *Opuntia* as a subtropical genus, but while looking up references for this note I came across some information quite to the contrary as regards some species; it may be new to others, as it was to me. In the copy of the first edition of the Manual, at the Gray Herbarium, is a note against *Opuntia vulgaris*, in Dr. Gray's handwriting, "Grows N. on rocks to lat 50°. Dr. Richardson." The Richardson seems to be Sir John Richardson,² who says, "Cacti are numerous on the eastern side of the mountains in the same parallel; and the smaller kinds, chiefly *Opuntiae*, range northwards over prairies to the 49th parallel, and perhaps further north. We gathered *Opuntia glomerata* or the *Crapaud vert* of the voyagers, on the Lake of the Woods." A still more northern range is shown by Macoun³ "*O. Missouriensis* DC., Prickly Pear. We refer all our eastern forms to this species, but without being certain, as specimens have seldom been preserved. The Qu'Appelle valley, about two miles from its mouth, and the north bank of the Assiniboine, above Shell River, are the most eastern localities known. It is found at Moose Jaw Creek and at the elbow of the South Saskatchewan, and thence south and west to Long. 112° at the Hand Hills. A species which I believe to be the same, reappears again at the north bank of Peace River, Lat. 56° 12', where it grows on the arid clay slope, exposed often to a temperature of 55° below zero."

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¹ Catalogue of the Flowering Plants and Ferns of Connecticut, 1910, p. 289.

² Arctic Searching Expedition, New York, 1852, p. 418.

³ John Macoun, Catalogue of Canadian Plants, Vol. I, 1883, p. 177.